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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,061	03/01/2000	Venkat Gopalan	50093/016001	3858

7590

04/11/2002

Kristina Bieker-Brady, PHD
Clark & Elbing LLP
176 Federal Street
Boston, MA 02110

EXAMINER

PATTERSON, CHARLES L JR

ART UNIT

PAPER NUMBER

1652

DATE MAILED: 04/11/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,061

Applicant(s)

GOPALAN ET AL.

Examiner

Charles L. Patterson, Jr.

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/28/00, 9/1/01 & 2/19/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2/</u> | 6) <input type="checkbox"/> Other: _____ |

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Applicant's election with traverse of Group I with a species election of SEQ ID NO:27 in Paper No. 11 is acknowledged. The traversal is on the ground(s) that claims 8-11, 13 and 14 should be in Group I, not Group III. This is found persuasive and the claims will be re-grouped as requested. Claims 1, 2, 8-11 and 13-14 will be examined. The requirement is still deemed proper with respect to the remainder of the requirement and is therefore made FINAL.

Claims 3-7 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 11.

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 because at least the sequences in Figure 1 are not included in the sequence disclosure, nor are they labeled as to SEQ ID NO: in the specification. Because the application could be examined without these sequences this has been done, however these sequences must be included in the sequence disclosure either before or with the reply to this action.

The disclosure is objected to because of the following informalities:

On page 11, lines 21-25, it is stated that "in Fig. 2, the three dimensional structure reveals that all of the residues that make up the above-described nine amino acid subset are proximal to each other in the tertiary structure of the protein". Figure 2 does not disclose anything about tertiary

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ary structure but rather the primary structure of 19 proteins and their corresponding nucleotide sequences.

Appropriate correction is required.

Claims 2, 9 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

NY Claims 2 and 9 are confusing in that they recite sequences that were not elected for prosecution.

NO Claim 9 is indefinite in the recitation of "substantially identical". Is the phrase meant to indicated 99% identity or perhaps only 50% or 20%. As it now stands the phrase indicates some identity with "substance".

Claim 13 is indefinite in the recitation of "said fluorescence analysis" on line 1. There is no antecedent basis for this term in clam 11, 8 or 1, upon which the claim depends.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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Claim 14 requires that the buffer comprise "1-10 mM DTT" while the only mention of this in the specification is on page 22, lines 20-21 where it is recited as being "2-10 mM DTT".

Claims 8-11 and 13-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification teaches various possibilities for assaying RNase P activity and for screening for antibacterial agents (antibiotics). However, nowhere is it taught that antibiotics inhibit and/or interfere with RNase P activity. With such a disclosure one of ordinary skill in the art would reasonably conclude that applicants did not have possession of the claimed method of using antibiotics to inhibit RNase P activity at the time of filing.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 102(a or b) as being anticipated by either of Gress, et al. (AA), Guth, et al. (AB), Altman, et al. (AC & AD), Frank, et al. (AE), Gopalan, et al. (AF), Pace, et al. (AJ), Pascual, et al. (AK) or Peck-Miller, et al. (AG). Each of the instant references teach a consensus sequence for RNase P.

Claims 8, 10, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Potuschak, et al. (U), Mikkelsen, et al. (V) or Schroeder, et al. (W). Potuschak, et al. teaches on page 3240, column 2, last full paragraph that the antibiotic puromycin inhibits the RNase P holoenzyme. Mikkelsen, et al. teaches at least in the paragraph spanning columns 1 and 2 of page 6155 that "several members of this class of antibiotics [aminoglycosides] indeed interact with RNase P RNA and interfere with its function". Schroeder, et al. teaches at least in the abstract that "aminoglycosides [antibiotics] inhibit several catalytic RNAs such as...RNase P".

It would have been obvious to one of ordinary skill in the art to identify an antibiotic agent by seeing if it decreased the activity of RNase P on a RNase P substrate in view of the teachings discussed *supra* in the instant references. It would have been a matter of choice and/or routine experimentation what exact assay method was used or what was in the assay mixture, absent unexpected results.

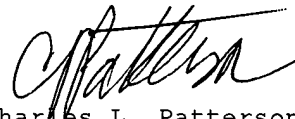
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Claims 2 and 9 are free of the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles L. Patterson, Jr., PhD, whose telephone number is 703-308-1834. The examiner can normally be reached on Monday - Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 703-308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-0294 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Charles L. Patterson, Jr.
Primary Examiner
Art Unit 1652

Patterson
April 9, 2002